

What is claimed is

1. A device 1 for the automated cutting of bread 4 into
5 slices comprising an element 7 driving the bread 4 and a set of blades 8
cutting the bread 4 disposed substantially parallel to one another and
arranged so as to be driven in an alternating reciprocating movement, the
element 7 driving the bread 4 being arranged so as to be moved in a
translation movement transverse to the set of blades 8 by a movement
10 means 10 coupled to said drive element 7 between a first retracted
position in which the bread 4 to be sliced can be loaded in the device 1
and a second advanced position in which the element 7 driving the bread
4 is adjacent to the set of blades 8 and the sliced bread can be removed
from the device 1, the latter also comprises a regulation means 14
15 arranged so as to automatically regulate the power supplied by the
movement means 10 according to the speed and/or acceleration of the
translation movement of the element 7 driving the bread 4 during the
operation of slicing it, said regulation means 14 being arranged to
compare the speed of movement of the drive element 7 with a
20 predetermined speed and for respectively increasing or reducing the
power of the means 10 of moving said drive element 7 when said
movement speed is respectively less than or greater than the
predetermined speed.

2. The device 1 as claimed in claim 1, wherein said
25 movement means 10 is an electric motor comprising a rotor and a stator
and said regulation means 14 is arranged to measure the speed of
rotation of the rotor in the stator in order to determine the speed of
translation movement of the element 7 driving the bread 4.

3. The device 1 as claimed in claim 2, wherein said
30 regulation means 14 is arranged to reduce the intensity of the current
consumed by said motor 10 to a first predetermined value when this
intensity exceeds a second predetermined value.

4. The device 1 as claimed in either one of claims 2 or 3, wherein said regulation means 14 is arranged to cause a reversal of the direction of movement of the element 7 driving the bread 4 when it reaches its first or second position.

5 5. The device 1 as claimed in claim 4, wherein said reversal is controlled by at least one photoelectric cell arranged so as to mark the arrival of the drive element 7 in its first or second position.

10 6. The device 1 as claimed in claim 4, wherein said regulation means 14 is arranged to measure the number of turns made by the rotor of the motor 10 in its stator and to cause said reversal from one of the first or second positions of the drive element 7 when said number of turns reaches a predetermined value from the other one of the first and second positions of the drive element 7.

15 7. The device 1 as claimed in claim 4, wherein said reversal is caused from one of the first or second positions of the drive element 7 when the intensity of the current consumed by the motor 10 exceeds a predetermined value.

20 8. The device 1 as claimed in any one of claims 2 to 7, wherein the motor 10 is coupled to the drive element 7 by means of a ram 11 and an articulated arm 12.

9. The device 1 as claimed in claim 1, wherein said movement means 10 is a source or reservoir of compressed air.